Functions of Permanent Storage

Once digital records enter permanent storage, administrative functions and preservation policies and standards ensure the preservation of the record. Functions within permanent storage involve eight large steps:

- A request to store digital records is sent from Ingest and moves the digital records into permanent storage.
- The appropriate storage device or media is selected based on the anticipated frequency of use.
- Upon completion of the records into permanent storage, a message is sent to the transferring agency notifying it of the completed accession.
- Based on policies, standards, and operational statistics, the storage media is managed and replaced on a systematic basis.
- Audit programs capture use statistics and document the implementation of preservation strategies.
- Periodic sampling and testing of individual and groups of records is completed to ensure the continued accessibility of records.
- Error logs trigger additional steps in the preservation strategy to ensure the continued accessibility of digital records.
- Customer queries cause the creation of access copies of digital records (confidential information is redacted from the access copy). These copies are sent to temporary web storage where the customer may view, print, or download the documents.

Figure 1 provides an overview of the functions of permanent storage.
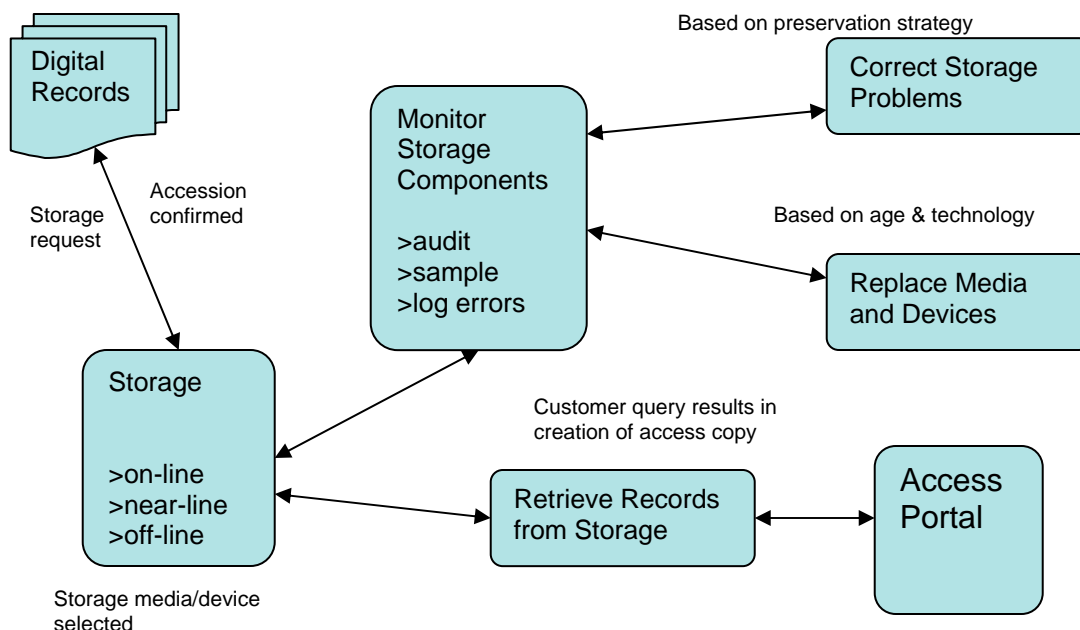
Storage

Upon completion of processing (refer to Transfer and Ingest Process), the storage hierarchy receives a request to store the records. Metadata added to the record during processing should indicate the anticipated use frequency in order for a decision on storage media or device to be made. Once stored, the system sends an automated response to the transferring agency indicating the Archives acceptance of the records. At this time, the agency may delete the record from its network.

Manage Storage

While much attention is paid to the development of preservation strategies, such strategies are not applicable if the records for which they are to be used are not properly maintained and protected in the recordkeeping and/or records preservation systems that contain them. There are eight maintenance strategies that will be employed:

- Clear allocation of responsibilities
- Provision of appropriate technical infrastructure
- Implementation of a plan for system maintenance, support and replacement
- Implementation of a plan for the transfer of records to new storage media on a regular basis
- Adherence to appropriate storage and handling conditions for storage media
- Redundancy and regular backup of the digital objects
- Establishment of system security
- Business continuity and disaster planning

Error Checking

At periodic intervals, the staff will run checks on the storage components to identify viruses within the system and corrupt media and/or disc drives. Should a virus or worm penetrate the system, the secondary digital archives site will switch to become the primary site. If required, backup tapes will be used to restore data. In addition, error checks will be run on the digital objects stored on the components to ensure they have not corrupted and to ensure that the records are free of viruses.

Replace Media

Routine replacement schedules for storage media will be established to ensure that aging media are replaced well in advance of possible failure. Periodic error checks will determine the need to replace media prior to the scheduled date.

Access to Permanent Storage

There will be no public access to Permanent Storage. Rather, a member of the public will conduct a search for information by querying 'finding aid' database. Upon selecting a record(s) to view, the system will generate an 'access' copy of the record(s) in permanent storage. This copy will be redacted to shield any confidential information and will be available for the customer to view, print, or download.

Transferring agency staff and Archives staff will be allowed to view an un-redacted copy of agency records, assuming they have the appropriate clearance to view the full record.